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Typed or printed Michael George Applicant requests review of the final rejection in the above	Yung-S Art Unit 3623	eop Lee	
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This request is being filed with a notice of appeal.			endments are being filed
The review is requested for the reason(s) stated on the at Note: No more than five (5) pages may be provid	led.	s).	Hern
applicant/inventor.			nature
assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)	Har	den E. Steve	ns III printed name
attorney or agent of record.	/ 9		
Registration number	<u> </u>		one number
x attorney or agent acting under 37 CFR 1.34.	No	ovember 14, 2	
Registration number if acting under 37 CFR 1.34			Date
NOTE: Signatures of all the inventors or assignees of record of the entire Submit multiple forms if more than one signature is required, see below X *Total of forms are submitted.	tire interest or the	ir representative(s) are	e required.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mall Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Yung-Seop Lee

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Group Art Unit: 3623

Serial No.:

09/782,149

Examiner:

Atty. Dkt. No.:

Peter H. Choi

Filed:

February 14, 2001

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For:

COMPUTER IMPLEMENTED

8907 (NCR)

CUSTOMER VALUE MODEL IN

AIRLINE INDUSTRY

Mail Stop AF Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Dear Sir:

Applicant requests review of the final rejection, in this case. No amendments are being filed with this request. This request is being filed with a Notice of Appeal.

Independent Claim 1

Claim 1 was rejected under 35 USC § 102(b) as being anticipated by "Quick Profits with RFM Analysis" by Arthur Hughes (hereinafter referred to as Reference A). It is respectfully submitted that Reference A does not show or suggest a "third sorting [of] the plurality of records in to an order based on the attribute values associated with at least the first attribute and the second attribute ...," as required by Applicant. Reference A teaches a method of ranking customers based on assigning three discretized attribute scores to each customer. Each of the three scores has a range from 1 to 5 so there exist 125 possible combinations of scores. Each of the possible 125 combinations is referred to as a "cell." Reference A further teaches that each customer is assigned a value for

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each of the three scores and that all customers having identical values for all three scores are said be ranked in the same cell. Once customers are assigned scores and ranked together, based solely on their discretized attribute scores, no additional refinement or sorting is made to the order of the customers within a cell. Applicant on the other hand, requires a third sorting, not based on a discretized attribute scores but instead based on at least first and second actual attribute values. This third sorting occurs after sortings based on discretized attribute scores have been completed. This third sorting by attribute value is not shown or suggested by Reference A.

Additionally, it is respectfully submitted that Reference A does not show or suggest "assigning an evaluation score to each record which has been sorted," as required by Applicant. Reference A only teaches the assigning of three discretized attribute scores that have 125 possible combinations. Nowhere does Reference A show or suggest an assignment of an evaluation score that is in addition to the discretized attribute scores. The Office support this position on page 12 of the Action by asserting "Reference A fails to explicitly disclose an assigned evaluation score to records" It is clear from the facts and from the Office's own admission that this element is missing from Reference A.

Therefore, Reference A is clearly missing at least the above elements required by Applicant's claims. It is respectfully submitted that the Office Action has committed both legal and factual errors in rejecting claim 1.

Independent Claim 10

Claim 10 was rejected under 35 USC § 103(a) as being unpatentable over "Quick Profits with RFM Analysis" by Arthur Hughes (hereinafter referred to as Reference A). It is respectfully submitted that Reference A does not show or suggest a "third sorting [of] the records in order based on the associated values associated with at least the net revenue and the number of flights ...," as required by Applicant. As shown above for claim 1, Reference A does not perform a sort on the attribute values (in this claim, the attribute values are the net revenue and the number of flights) after sorting on the discretized attribute score. Furthermore, there is nothing in the teachings of Reference A that would have suggested to a person of ordinary skill in the art to perform such a sort.



Reference A is simply missing any motivation or suggestion to perform this sort.

Therefore, this element is missing from Reference A.

Additionally, as show above for claim 1, it is respectfully submitted that Reference A does not show or suggest "assigning an evaluation score to each record which has been sorted," as required by Applicant. This element is also missing from Reference A.

Reference A does not show or suggest all the elements of the claim. A *prima* facie case of obviousness therefore cannot be established with respect to claim 10. It is respectfully submitted that the Office Action has committed both legal and factual errors in rejecting claim 10.

Independent Claims 11, 12

Claims 11 and 12 were rejected under 35 USC § 103(a) as being unpatentable over Reference A in view of "Database Marketing Institute's RFM for Windows®" (hereinafter "Reference B"). It is respectfully submitted that Reference A does not show or suggest a "third sorting [of] the records in order based on the associated values associated with at least the net revenue and the number of flights ...," as required by Applicant. As shown above in the claim 10 argument, Reference A does not perform a sort on the attribute values after sorting on the discretized attribute score.

Additionally, as show in the claim 1 argument, it is respectfully submitted that Reference A does not show or suggest "assigning an evaluation score to each record which has been sorted," as required by Applicant. This element is also missing from Reference A.

Reference B teaches the invention of Reference A, implemented in a Window® environment. Reference B does not contain the above elements missing from Reference A.

Therefore, neither Reference A or Reference B shows or suggests all the elements of the claims. A *prima facie* case of obviousness cannot be established with respect to claims of 11 and 12. It is respectfully submitted that the Office Action has committed both legal and factual errors in rejecting claims 12 and 13.



Independent Claim 13 and 14

The Office action fails to specifically point out the statute used to reject these claims. Applicant will argue based on a 35 USC § 103(a) rejection for both claims. It is respectfully submitted that claims 13 and 14 are allowable for the same reasons as claims 11 and 12.

Dependent Claims 5 and 6

Claims 5 and 6 were rejected under 35 USC § 103(a) as being unpatentable over Reference A in view of Powers et at. (U.S. Pat. No. 6,604,084). It is respectfully submitted that a *prima facie* case of obviousness has clearly not been established with respect to the claims in view of Reference A and Powers. *See* M.P.E.P. § 2143, at 2100-135.

Reference A does not show or suggest a "third sorting [of] the records in order based on the associated values associated with at least the net revenue and the number of flights ...," as required by Applicant. As shown above in the claim 10 argument, Reference A does not perform a sort on the attribute values after sorting on the discretized attribute score.

The Office admits that "Reference A fails to explicitly disclose an assigned evaluation score to records of each group" but asserts that "Powers et al. teaches a performance evaluation system where a quality score is calculated for performance areas" and equates the quality score to Applicant's evaluation score. It is respectfully submitted that Powers does not show or suggest "assigning an evaluation score for records of each group," as required by Applicant. Powers teaches a "quality score 192 for a performance area 184 is calculated based on the relative weight of the questions 186 in the performance area 184." (Col. 11, lines 63-65.) Powers teaches a method for performing job performance evaluations. Powers uses questions to evaluate a person's performance. The quality score is based on the relative weight of questions asked about a performance area. This is not the same as Applicant's evaluation score. Because this element is missing from Powers, a *prima facie* case of obviousness cannot be established.

(NCR-8907)

Additionally, there clearly did not exist any motivation or suggestion to combine the teachings of Reference A and Powers. The two references are directed at completely different solutions. Reference A describes a method for classifying customers for sales promotions, whereas Powers describes a method for managers to perform consistent, objective evaluations in an efficient manor. There did not exist any desirability to incorporate the teachings of Reference A into the teachings of Powers, as these two references address completely different techniques and fields.

Because no motivation or suggestion existed to combine the teachings of Reference A and Powers, the *prima facie* case of obviousness cannot be established for this additional reason.

CONCLUSION

In view of the foregoing, it is respectfully requested that the final rejections of the claims be withdrawn and that all claims be allowed. The Commissioner is authorized to charge any additional fees and/or credit any overpayment to Deposit Account No. 14-0225.

Respectfully Submitted,

Date: 11-14-05

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